TG60456 उत्पाद मानक देनाक एवं हस्ताक्षर भी एग ई एम SIGN & DATE पुष्ठ 2 का 1 PRODUCT STANDARD Page 1 of 2 TURBOGENERATOR ENGINEERING INVENTORY NO. SUPERSEDES EMPTY HYDROGEN CYLINDER **SCOPE** 1.0 को अधिकम्पित करता है। सामग्री सूची संख्या This specification covers the design, manufacture, testing and supply of EMPTY HYDROGEN CYLINDER As per the requirements spacified herein. 2.0 STANDERD APPLICABLE The information on this documents is the property of Blurat Heavy Electrical Listnier Latest addition of IS: 3224 and IS:7285. COPYRIGHT AND CONFIDENTIAL 3.0 **DIMENSIONS** Outside diameter a. =232 mm.Cylinder wall thickness b. =5.4 mm.(Min) Overall length =1445 mm c. It mest not be used directly or indirectly in any .. 4.0 **DESIGN** The top end should be necked down to 2" dia. And screwed internally to dia 1" standard taper 1 in 8, 14 TPI to IS: 3224. The bottom of cylinder shall be concave. 5.0 **FITTINGS** हस प्रतेष में दी वह पूचना भारत हेवें इनोनेट्रकरम की सम्पत्ति है इसका प्रत्यक्ष एवं प्रप्रत्य कम से मिनी की सन्ध्र प्रजेन, यो कि कंपनी के हित में हानिकारक हो न निज्य जन् The Gas cylinder should be complete with the following fittings/accessories. neck collar a. स्वत्वाधिकार एवं गोपनीय b. protection cap. outlet valve to IS:3224 c. 6.0 **CAPACITY** a. Water capacity =46.7 Liters b. Volume of Gas $=7 \text{ M}^3 \text{ (app)}$ नाम दिनांक एवं हस्तक्षर NAME SIGN. & DATE इस्ताक्षर एव दिनाक TSX KISHAN LAL अनुवादक TRANSLATED BY SIGN & DATE **PSC Member** ·CHAND निर्माणकर्ता WORKED BY KN 29/6/02 QAX KUMAR 29/6/64 8 जांचकर्ता CHECKED BY K.R.G. सहमत विभाग नाम पर्यवेक्षणकर्ता K.R.GUPTA 29/6/64 DATE & SIGNATURE AGREED DEPTT. NAME SUPERVISED BY स्वीकृति : गमग्री सूची सख्या INVENTORY NO. APPROVED: (AGM/TGE) 9 **REV. NO. 01** निर्माण PREPARED ज़ारी ISSUED दिनांक : DATE S

TGE, HEEP, HWR

DATED: 12.8.04

01-11-93

TGE, HEEP, HWR

TG60456 उत्पाद मानक SIGN & DATE दिनांक एवं हस्ताक्षर PRODUCT STANDARD पुष्ठ 2 का 2 TURBOGENERARTOR ENGINEERING Page 2 of 2 INVENTORY NO. SUPERSEDES 7.0 **WORKING PRESSURE:** 150kg/cm2 त्री अधिकमित करता है । सामग्री सुची संख्या 8.0 MATERIAL The cylinders shall conform to IS: 7285 and shall be made of seamless steel tubes high carbon manganese steel. The valve body shall be made of brass and internals of stainless steel. 9.0 TEST REQUIREMENTS OF CYLINDERS: As per IS: 7285 t must not be used directly or indirectly in any way detrimental to the interest of the company 10.0 PAINTING AND MARKING ON CYLINDERS information on this documents is the property of Bharat Heavy Electrical Limited. COPYRIGHT AND CONFIDENTIAL To be as per IS: 7285 11.0 INFORMATION REQUIRED WITH THE OFFER Cylinder drawing indicating the following details: The standard to which cylinder and fitting conform. a. Capacity, size and wall thickness of cylinder. b. c. Details and arrangement of fittings. d. Minimum wall thickness of cylinder. Working pressure, pneumatic test pressure, hydraulic test pressure and hydraulic strech test e. pressure and hydraulic strech test pressure. 12.0 TEST CERTIFICATES а Test certificates for all tests indicate in clauses 9.0 of this specification. महत्त्वा कर में किसी की तरह प्रयोग, जो कि कंपनी में हित में हानिकारक हो न किया जाए b. Manufacturer shall be furnish inspection certificates from BIS and approval certificates from इस प्रलेख में दी गई सूचना भारत हैवी इसेन्ट्रिकस्त की सन्दरित है इसका प्रत्या एवं from Dept. of Explosives, Nagpur. स्वत्वाधि-..४ एवं गोपनीय 13.0 **GENERAL** The offers submitted shall be strictly in line with the requirements specified in this specification. All the documents as required in clause 11 and 12 shall be submitted in 5 copies. 14.0 **BASED ON:** BHEL Experience 15.0 CROSS REFERRED STANDARD: IS: 3224, IS: 7285, 13 IN & DATE 19/m/ सामग्री सूची संख्या d INVENTORY NO 597 निर्माणकर्ता KN 25/6/04 01 Worked by KRG जांचकर्ता 29/6/04 REV. Checked by

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ETTE	SS	.8.	QAX सहमत विभाग	J. K.	UM AR	D.14 7 दिनांक एवं हस्ताक्षर	णांचकर्ता CHECKED BY	K.R.G.	lhfl 29/6/09					
_	4	14	AGREED DEPTT.		NAME	DATE & SIGNATUR	पर्यवेक्षणकर्ता SUPERVISED BY	K.R.GUPTA	Khol 29/6/04					
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APPROVED:

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TGE, HEEP, HWR

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SUPERSEDES INVENTORY NO.	7.0	WORKING PRESSURE : 150 Kg/cm2	2									
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एवं गीप इक्स्स्त के सम	13.0	<u>GENERAL</u>										
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। प्रदेश में दी या तक्ता के किसी	14.0 <u>BASED ON</u> : BHEL Experience.											
	15.0	15.0 <u>CROSS REFERRED STANDARD:</u>										
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TG60457 उत्पाद मानक देनाक एवं हस्तामा SIGN & DATE पुष्ठ २ का १ PRODUCT STANDARD Page 1 of 2 TURBOGENERATOR ENGINEERING INVENTORY NO. SUPERSEDES EMPTY CARBONDIOXIDE CYLINDER 1.0 **SCOPE** अधिकमित करता है। सामग्री सूबी संख्या This specification covers the design, manufacture, testing and supply of EMPTY SEAMLESS CARBONDIOXIDE CYLINDER As per the requirements specified herein. 2.0 STANDERD APPLICABLE Latest addition of IS: 3224 and IS: 7285. COPYRIGHT AND CONFIDENTIAL 3.0 **DIMENSIONS** Outside diameter =232 mm. Cylinder wall thickness b. =5.4 mm.(Min) Overall length =1450 mm C. 4.0 **DESIGN** The top end should be necked down to 2" dia. And screwed internally to dia 1" standard taper 1 in'8, 14 TPI to IS: 3224. The bottom of cylinder shall be concave. 5.0 **FITTINGS** इन प्रतेष में दी कई सूचना भारत हेती इसेविट्रकलन की सम्परित है इसका प्रत्यक्ष एवं स्पन्न क्षा से किसी भी सरह प्रचेष चो कि कंपनी के हित में इस्निकारक हो ने किया जाए The Gas cylinder should be complete with the following fittings/accessories. neck collar स्वत्वाधिकार एवं गोपनीय protection cap. b. outlet valve to IS: 3224 c. Syphon tube đ. Safety valve / bursting disc 6.0 **CAPACITY** Water capacity =46.7 Liters a. $=17.4 \text{ M}^3 \text{ (app)}$ Volume of Gas at NTP b. नाम दिनांक एवं हस्ताक्षर NAME SIGN. & DATE 0 TSX KISHAN LAL अनुवादक TRANSLATED BY SIGN & DATE S **PSC Member** CHAND निर्माणकर्ता WORKED BY KN KUMAR QAX जांचकर्ता CHECKED BY K.R.G. सहमत विभाग दिनांक एवं हस्ताक्षर नाम पर्यवेक्षणकर्ता K.R.GUPTA DATE & SIGNATURE AGREED DEPTT. NAME SUPERVISED BY स्वीकृति : Ø सामग्री सूची सख्या INVENTORY NO. 16 APPROVED: DEVRAY (AGM/TGE) **REV. NO. 01** दिनांक : DATE निर्माण PREPARED जारी ISSUED 01-11-93 DATED:12-8-04 TGE, HEEP, HWR TGE, HEEP, HWR

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COPYRIGHT AND CONFIDENTIAL The information on this documents is the property of Black Heavy Bearinest Limited. It must not be used directly or indirectly in any way dentinestal to the inferent of the company.	The cylinder shall conform to IS: 7285 and shall be made of seamless steel tubes high carbon manganese steel. The valve body shall be made of brass and internals of stainless steel. 9.0 TEST REQUIREMENTS OF CYLINDERS; As per IS: 7285. 10.0 PAINTING AND MARKING ON CYLINDERS To be as per IS: 7285 11.0 INFORMATION REQUIRED WITH THE OFFER Cylinder drawing indicating the following details: a. The standard to which cylinder and fitting conform. b. Capacity, size and wall thickness of cylinder. c. Details and arrangement of fittings. d. Minimum wall thickness of cylinder. e. Working pressure, pneumatic test pressure, hydraulic test pressure and hydraulic strech test											
स्वत्वाधिकार एवं गोपनीय इस प्रतेष ने वे व्यक्तम मत्ता हैती हमेक्ट्रका की सन्तीत है हनका प्रव्याप्त आरख्या का से किसी में तत्तर प्रवेग, व्यक्ति कंपनी के लिय में हानिकारक हो ने किया वाप्	12.0	a. b.	Filling ratio of cylinder T CERTIFICATES Test certificates for all tests indicate in cl Manufacturer shall be furnish inspection from Dept. Of explosives Nagpur. NERAL The offers submitted shall be strictly in lithis specification. All the documents as required in clause 1	certificates from BIS	and appr	oval certifica	tes from					
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NTPC QUALITY PLAN

	MANUFACTUR ADDRESS:	MANUFACTURING QUALITY PLAN					PROJECT: PACKAGE:						
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QUALITY PLAN

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